## **CHAPTER 7**

## RAILROAD RADIO RULES

The following rules and requirements cover use of railroad radio systems and govern personnel using such systems.

Rule 501. Internal Adjustments. All personnel except those specifically authorized by the Federal Communications Commission (FCC) or those holding a current Certified Technician's Certificate, are prohibited from making any internal adjustments to a railroad radio. Authorized personnel must carry their FCC operator license, Certified Technician's Certificate, or verification card when on duty.

Rule 502. Prohibited Transmissions. Personnel shall not knowingly transmit any false emergency communication, any unnecessary, irrelevant, or unidentified communication, nor utter any obscene, indecent, or profane language via radio. Personnel shall not divulge or publish the existence, contents, effect, or meaning of any communications (emergency communications excluded) except to the person for whom the communication is intended or to another individual of the railroad whose duties may require knowledge of the communication. The above applies either to communications received directly or to any that may be intercepted.

Rule 503. Emergency Calls. Any emergency call will be preceded by the word "Emergency" repeated three times. Such calls shall be used to cover initial reports of derailments, collisions, storms, washouts, fires, or obstructions to track. Emergency calls also cover other matters which would cause serious delay to traffic, damage to property, or injury to personnel or the traveling public. They must contain as complete information as possible. All personnel must give absolute priority to communication from a station in distress, and except in answering or aiding that station, shall refrain from sending any communication until ensuring that no interference will result.

**Rule 504. Inspections.** Any personnel shall permit inspection of the radio equipment in his charge and all FCC documents pertaining to such equipment by an accredited representative of the FCC at any reasonable time.

**Rule 505. Locations.** The location of radio base and wayside stations, the time such stations are attended, and assigned channels, will be designated by timetable or other instructions.

Rule 506. Transmitting. Before transmitting, any individual operating a radio must ensure that the channel is not already in use. The operator must give the required identification, listen for acknowledgment from the person receiving the transmission, and must not proceed with the transmission until such acknowledgment is received.

**Rule 507. Identification.** Personnel transmitting or acknowledging a radio communication must begin with the required identification. The order must include the following information:

- Base or wayside stations Name or initials of the railroad, and name and location or other unique designation of office or station.
- *Mobile units* Name or initials of the railroad, train name (number), engine number, or words that identify the precise mobile unit.
- If an exchange of communication continues without substantial interruption, personnel must repeat identification each 15 minutes. After positive identification has been made in connection with switching, classification, and similar operations wholly within a yard, fixed and mobile units may use short identification after the initial transmission and acknowledgment.

**Rule 508. Acknowledgment.** A person receiving a radio call must not delay acknowledgment unless it would interfere with duties relating to safety.

**Rule 509. Repetition.** An individual who receives a transmission must repeat it to the transmitting party, except when the communication-

- Relates to switching operations.
- $\bullet$  Is a recorded message from an automatic alarm device.

• Is general in nature and does not contain any information, instruction, or advice which could affect the safety of a railroad operation.

**Rule 510. Over.** To indicate to the receiving person that the transmission is ended and that a response is expected, the transmitting person must say the word "over."

**Rule 511. Out.** To indicate to the receiving person the exchange of transmissions is complete and that no response is expected, the transmitting person must state his identification followed by the word "out."

**Rule 512. Monitoring.** When base and wayside stations or mobile units are manned, the radio must be turned to the appropriate channel with the volume adjusted to receive communications. All transmissions directed to a manned station or mobile unit must be acknowledged.

**Rule 513. Misuse.** Radio communication must not be used to avoid compliance with any rule.

Rule 514. Not Understood or Completed. Any radio communication which is not understood or completed according to these rules must not be acted upon and must be treated as though it was not sent. An exception would be if any information is received which would affect the safety of personnel or the public or cause damage to property. If necessary, movement must be stopped until an understanding has been reached.

**Rule 515. Testing.** Radios used in train operation outside yard limits must be tested at the point where the train is originally made up.

**Rule 516. Operative Radio.** Engineers and conductors must test the radios at least once during each tour of duty to ensure that the radios are working.

**Rule 517. Test Transmission.** Radio tests must consist of an exchange of voice transmissions with another radio. Radio tests help ensure that voice transmissions are readable and of good quality.

**Rule 518. Malfunctioning Radio.** A malfunctioning radio must not be used. Each crew member, the train dispatcher, or other designated personnel must be notified of the malfunction by alternate means of communication as soon as possible.

Rule 519. Fixed Signal Information. A radio must not be used to give information to a train or engine crew about the name, position, aspect, or indication displayed by a fixed signal. Such information may only be given between members of the same crew or when necessary to give warning in an emergency.

**Rule 520. Lieu of Hand Signals.** When radio is being used in lieu of hand signals, both the direction and distance to be traveled must be given. Movement must be stopped in one-half the distance specified unless additional instructions are received.

- **Rule 521. Transmitting Train Orders.** When train orders are transmitted by radio, they must be transmitted according to applicable operating rules, and the following guidelines:
- The train dispatcher or operator shall call the addressees of the train order and state his intention to transmit the train order.
- Before the train order is transmitted, the person to receive and copy the train order shall state his name, rank identification, location, and that he is prepared to receive a train order. Train orders may not be copied by a person operating the controls on an engine of a moving train. Train orders are not transmitted to the crew of a moving train. The conductor, the engineer, or the train dispatcher must decide if the train order can be received and copied without impairing the safe operation of the train.
- Train orders shall be copied in writing by the receiving person in the format prescribed in the operating rules.
- Except as provided by Rule 514, before a train order is acted upon, both the conductor and engineer must have a written copy of the train order. They must ensure that the train order is read and understood by other members of the crew.
- Except as provided by Rule 514, a train order transmitted by radio which has not been made complete may not be acted upon and must be treated as though not sent.

• Information contained in a train order may not be acted upon by persons other than those to whom the train order is addressed. "Complete" must not be given to a radio transmitted train order for other trains until "Complete" response has been acknowledged by the train being restricted.

Rule 522. Transmitting Track Warrants and Track Bulletins. When radio is used to transmit track warrant or track bulletin, rules applicable only within two limits and track bulletin rules will govern. They must not be copied by a soldier operating the controls on an engine of a moving train.

**Rule 523. Blasting Operations.** Do not operate radio transmitters when they are less than 250 feet from blasting operations.

**Rule 526. Clarity.** If necessary for clarity, the phonetic alphabet shall be used to pronounce any letter used as an initial, except initial letters of railroads.